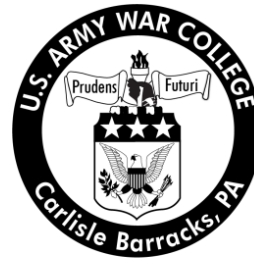


Strategy Research Project

F-35 Risk During Department of Defense Financial Crisis

by

Lieutenant Colonel Christopher J. DeJesus
United States Air Force



United States Army War College
Class of 2013

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USAWC STRATEGY RESEARCH PROJECT

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Lieutenant Colonel Christopher J. DeJesus
United States Air Force

Professor Louis Yuengert
Department of Command, Leadership, and Management
Project Adviser

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U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013

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The current United States budget crisis could impact every program from Social Security to the Department of Defense. The financial issues present the Air Force a great opportunity to re-evaluate the F-35A Lightning II fighter portfolio. In the Fiscal Year 2013 Air Force portion of the President's Budget request, the Air Force reduced F-35A production by 66 aircraft between FYs 2013-2016, but did not reduce the overall total requirement of 1,763 aircraft. This paper will analyze the risks of the F-35A program as it relates to the Quadrennial Defense Review and uses the risk framework outlined in the 2010 Quadrennial Defense Review including institutional risk, operational risk, force management risk, and future challenges risk. While analyzing the risk, it is important to also examine the F-35A program and identify the implications in achieving the new DoD Strategic Guidance. There is risk in moving F-35A procurement to the future years, but it is feasible to achieve the new strategic objectives in the Defense Strategic Guidance.

F-35 Risk During Department of Defense Financial Crisis

The Department of Defense (DoD) provides military resources to protect the security of the United States of America. Today's DoD is facing a fiscal challenge unlike any event in history. In the Fiscal Year (FY) 2013 President's Budget President Barack Obama wrote "we are facing a make-or-break moment for the middle class, and for all those who are fighting to get there. What is at stake is whether or not this will be a country where working people can earn enough to raise a family, build modest savings, own a home, and secure their retirement. This is the defining issue of our time."¹ In 2010, Secretary of Defense (SECDEF) Robert Gates introduced an efficiencies initiative² which essentially reduced the DoD budget by \$487B over the Future Years Defense Program.³ This exemplified how serious the impacts of the current fiscal situation affect the DoD budget. The SECDEF also released the Quadrennial Defense Review (QDR) in February of 2010, a "legislatively-mandated review of Department of Defense strategy and priorities."⁴ The QDR sets a long-term course for the DoD to assess U.S. threats and challenges while re-balancing the DoD's strategies, capabilities, and forces to address today's conflicts and tomorrow's threats.⁵ The fiscal challenge and newly emerging strategic interests set the stage for the DoD to release new strategic guidance for the DoD titled "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense." This new Defense Strategic Guidance aimed to maintain the security of the United States, its allies, and partners; maintain the prosperity of open and free international economics; and maintain international order and uphold the rights and responsibilities of nations and people.⁶

The current United States budget crisis could impact every program from Social Security to the Department of Defense. The financial issues present the Air Force a

great opportunity to re-evaluate the F-35A Lightning II fighter portfolio. In the Fiscal Year 2013 Air Force portion of the President's Budget request, the Air Force reduced F-35A production by 66 aircraft between FYs 2013-2017, but did not reduce the overall total requirement of 1,763 aircraft. This paper will analyze the risks of the F-35A program as it relates to the QDR and uses the risk framework outlined in the 2010 QDR including institutional risk, operational risk, force management risk, and future challenges risk. While analyzing the risk, it is important to also examine the F-35A program and identify the implications that the changes in the programs have with respect to achieving the new DoD Strategic Guidance. The F-35A can achieve the new strategic objectives in the Defense Strategic Guidance even with the risk of moving F-35A procurement to the future years.

The Air Force budget is approximately \$154.3B in FY2013⁷ with its top priority to fly, flight, and win in air, space, and cyberspace.⁸ The Air Force has twelve core functions to accomplish its top priority⁹:

1. Air Superiority
2. Global Precision Attack
3. Global Integrated Intelligence, Surveillance, and Reconnaissance (ISR)
4. Cyberspace Superiority
5. Space Superiority
6. Nuclear Deterrence Operations
7. Rapid Global Mobility
8. Command and Control
9. Special Operations

10. Personnel Recovery

11. Building Partnerships

12. Agile Combat Support

The Air Force budget, however, is not sufficient to cover everything desired to support the twelve core functions. Like every other military service, senior leaders have to set clear priorities and make tough decisions based on requirements and available funding. These decisions range from determining the most important research and development programs, to personnel and operation and maintenance to support the Air Force mission. This is where risk comes into play at various levels. Senior leaders at the Department level decide how the Air Force will meet Combatant Commander (CCDR) requirements and strategic guidance. Leaders are ultimately taking institutional, operational, force management, and future challenges risks while achieving national objectives within the annual budget.

Two of the core functions most closely related to the F-35A are Air Superiority and Global Precision Attack. Air Superiority describes the U.S. ability “to deter and defeat adversaries in multiple conflicts and across all domains,” or the ability to dominate the enemy in contested skies.¹⁰ The requirement to achieve air superiority places a great strain on the current F-22 fighter and the aging F-15 and F-16 legacy fleet to meet war-time requirements. Global Precision Attack describes air forces performing traditional strike and customized Intelligence, Surveillance, and Reconnaissance roles to support CCDR forces.¹¹ Current Air Force fourth generation fighters are not expected to be able to continue to match international rival fighters in the future: therefore, in 2001, the Air Force started development of another fifth-

generation aircraft to enhance their global strike ability. This aircraft is the F-35A Lightning II.

F-35A Lightning II Program History and Overview

The F-35A is the world's newest and most technologically advanced fighter jet comprised of an advanced propulsion system, avionics suite and weapons system.¹²

The F-35A is the second fifth-generation fighter, and it is designed to be nearly undetectable to an enemy. The F-35A gives the U.S. Air Force and its allies the power to dominate the skies at all times. The F-35A is an agile, versatile, high-performance multirole fighter that provides unprecedented situational awareness and unmatched capability.¹³

The F-35A program started as the Joint Advanced Strike Technology program in 1997 and quickly evolved to the Joint Strike Fighter (JSF) program when the DoD awarded the contract to Lockheed Martin on October 26, 2001. Unique to the program is multi-service and multi-nation cooperation to develop a 70 to 90 percent commonality for three different variants of the JSF (Air Force, Navy, and Marine Corps variants). The foundation of the program rested on four pillars: affordability, lethality, survivability and supportability. The intent of the program was also to improve upon the abilities of legacy aircraft (the F-16 and A-10 for the Air Force) with a single airframe. This was to enable cost savings and economies of scales for all users involved.¹⁴

As with many DoD acquisition programs, the F-35A has had its share of issues while it has gone from the System Development and Demonstration phase to the Initial Testing phase. Concurrency is a key aspect of the F-35A program, an approach intended to save time and money by launching construction at an early stage and at the same time the aircraft was put through flight tests. Concurrency assumes that technical

hurdles have been worked out in computer modeling.¹⁵ Setbacks in this area have been the largest reasons for delay, along with other issues including: excessive vibration; a multitude of software issues—the F-35A has three times the number of lines of code as the F-22; and a problematic high-tech helmet. On a positive note, the Air Force recently completed the 500th test of the F-35A at Eglin Air Force Base, which is slightly ahead of the latest schedule, but still about three years behind the original schedule.¹⁶

The Government Accountability Office (GAO) and Congress maintain close scrutiny of the JSF program and the Air Force variant. In numerous reports and in testimony before Congress, there has been much discussion about the unit cost per JSF. Congress is well aware of the developmental issues, and specifically addressed the lengthy delays in schedule and substantial cost overrun with Ashton Carter, the most senior acquisition official in the DoD in 2011. GAO stated in a March 2010 report that the flyaway unit cost of an F-35A was \$112 million; up roughly 50% from the estimated \$69 million in October of 2001. Flyaway cost is the cost to procure just the main aircraft and does not include associated operating and maintenance costs.¹⁷ The FY 2013 Air Force President's Budget estimated flyaway cost for the F-35A was approximately \$120M.¹⁸ The projected 50% cost growth triggered a Nunn-McCurdy unit cost breach of the critical threshold, a term used when a major defense acquisition program experiences cost overruns that exceed certain thresholds.¹⁹ As a result, former SECDEF Robert Gates restructured the JSF program to address the ongoing developmental challenges.

The F-35A role fits well with the latest Defense Strategic Guidance. In January 2012, President Barack Obama and SECDEF Leon Panetta published a new strategy

designed to meet future credible threats. It describes a role fitting for the F-35A, where expeditionary and small-scale conflicts are expected be the norm, instead of large area of responsibility and longer conflicts as we have seen recently in Iraq and Afghanistan. The norm will rely on coalition partners more and focus efforts on the Middle East and Pacific Rim regions.²⁰ The F-35A must be credible and ready to ensure the United States military is prepared to carry out this strategy. Former SECDEF Robert Gates and current SECDEF Leon Panetta fully support the Air Force requirement of 1,763 aircraft.²¹ Congress supported the JSF from the beginning as well²², but with all the changes in schedule and cost, coupled with constrained budgets for the United States military, it is uncertain how long the support will last. Vice Admiral David Venlet, the former Program Executive Officer of the JSF has admitted many mistakes about the program. He admitted that concurrency lead to the most drastic delays and cost overruns, and stated “All three F-35 variants are encountering the sort of design issues historically encountered in advanced technology programs of this complexity...While the overall F-35 design is sound, there is significant risk remaining in the program.”²³

Quadrennial Defense Review and Risk

Secretary Gates states that the QDR report “represents an important step toward fully institutionalizing the ongoing reform and reshaping of America’s military—shifts that rebalance the urgent demands of today and the most likely and lethal threats of the future.”²⁴ Measuring strategic risk is a tricky business as there is no quantitative or precise way to assess the risk taken. The DoD has a very complicated and unique mission unlike that of any other organization in the world; this makes the challenge of balancing strategy and risk very complex. Risk management is what makes the DoD successful every day; and is also the reason why the DoD takes the risk management

responsibility so seriously.²⁵ To assess risk in the QDR, the DoD used a multi-faceted approach utilizing best practices, informed judgments and expert opinions. Most importantly, the strategy drove the risk assessment; and the DoD's efforts "were informed by recent risk identification efforts conducted by various components of the Department, including the DoD Inspector General and the Government Accountability Office."²⁶ The DoD uses the following categories for its risk assessment: institutional risk, operational risk, force management risk, and future challenges risk. A detailed analysis of each category follows.

Institutional risk is the DoD's ability to produce effective and efficient organizations and processes over the short, mid, and long-term.²⁷ There is institutional risk for the F-35A in several areas including acquisition reform, optimizing the information technology process, and maintaining the defense industrial base.²⁸ This section will focus specifically on the risk associated with acquisition reform and maintaining the defense industrial base. Even with the previously highlighted cost and program issues, the JSF has acquisition initiatives worthy to benchmark for future acquisition programs with respect to design and testing, commonality, and international participation. Once the F-35A program office solves the remaining technical issues and full rate production starts, the contractor claims the fly-away cost will be lower than the current estimate, which is normal once production starts. Another success is the effort to design a 70-90% common platform between the three variants for the Navy, Marine Corps, and Air Force. Also worth mentioning is the international effort to design, fund, and produce the JSF. Although "International participation may not be the most cost-effective way for the U.S. to develop the JSF,"²⁹ there are benefits including stronger

foreign relations, regional stability, and operational effectiveness. The JSF program will also help energize the U.S. industrial base for the next couple of decades while in production.³⁰ The latest strategic guidance for the DoD specifically calls for the U.S. to work with North Atlantic Treaty Organization (NATO) allies to develop a smart defense approach to “pool, share, and specialize capabilities as needed to meet 21st century challenges.”³¹ The F-35A is the Air Force’s answer to multi-national cooperation to deter the enemy of the future.

The QDR describes the importance of sustaining the defense industrial base. “In order for the Department of Defense to develop, field, and maintain high-quality equipment, it must rely on a robust and capable defense industry...[to] ensure that our military personnel in harm’s way have the world’s best equipment...”³² Financially, the JSF and F-35A support the defense industrial base: As a 2004 GAO report noted, “the JSF program has the potential to significantly impact the U.S. defense industrial base. Suppliers chosen during the JSF development phase will likely remain on the program through production...contracts awarded now will likely affect the future shape of the defense industrial base.”³³ There are hundreds of national and international large and small businesses who stand to benefit from the JSF program throughout the U.S. and at least eight countries world-wide.³⁴

The defense industrial base should continue to survive and thrive with a \$300+ billion JSF contract, but there is still significant risk. There has been significant progress made in the restructuring of the production schedule after the Nunn-McCurdy breach; however, the fact remains that the program is behind schedule and well over originally estimated costs.³⁵ The FY 2013 President’s Budget pushed procurement to the future

years as the program tried to work out the remaining technical issues. There is still a threat of sequestration with an approximate \$500 billion cut over 10 years on top of a \$487 billion reduction through efficiencies laid out by President Obama in 2011.³⁶ The JSF is the only U.S. fighter jet currently in production as F-22 production is complete; there are only modifications to existing fighter jets happening while the F-35A goes through the acquisition processes to become an operational aircraft. Trying to determine the future of warfare, the Secretary of the Air Force has asked for inputs from the industrial base on the next sixth generation fighter. Until the F-35A is in full production, there is a potential skill gap from not having a fighter in continuous production.³⁷ This could affect the ability to utilize talent that might go elsewhere to support other international efforts. This poses a medium or even high institutional risk if there are not more programs started soon.

Operational risk describes the ability of the current force to execute a strategy successfully within acceptable human, materiel, financial, and strategic costs. Operational risk requires the DoD to assess its ability to execute current, planned, and contingency operations in the near term.³⁸ To determine the operational risk, it is important to look at the QDR and evaluate the risk of slipping F-35A production to future years and have existing fighter inventory fill the gap in production. This will shed light on the level of operational risk. The main strategy of the 2010 QDR is to prevail in today's wars, prevent and deter conflict, prepare to defeat adversaries and succeed in a wide range of contingencies, and preserve and enhance the all-volunteer force.³⁹ The Air Force request of 1,763 F-35A fighters is enough to replace all F-16s, A-10s, and F-117s combined (the F-117 retired in 1991). The capabilities of the F-35A would allow the U.S.

to operationally meet the main strategy of the QDR. It is important to note the originally requested quantity assumed a lower operational risk (wars in Iraq and Afghanistan were not significant when the DoD awarded the JSF contract) and there was no fiscal cliff or threat of sequestration to worry about.

The F-35A has received much attention from Congress over recent years, especially as a result of schedule delays and rising costs. This is a great risk from a congressional perspective, and has prompted questions on how many F-35A fighters are actually needed. The National Commission on Fiscal Responsibility and Reform recommended substituting brand new and updated F-16s for half of the F-35A purchases, and estimated an approximate \$6 billion savings through FY 2015.⁴⁰ Lockheed Martin was quick to respond saying “the commission’s proposal is currently not viable...because Lockheed Martin’s Fort Worth fighter factory is now optimized for F-35 production and would only be able to build a maximum of four F-16s per month.”⁴¹ The latest Defense Strategic Guidance uses an expeditionary mindset in multiple conflicts (Middle East and Asia); there is a greater emphasis on the joint force of 2020 “to meet future, unforeseen demands”⁴² and a reliance on coalition partners to “build the capacity and competence of U.S., allied, and partner forces for internal and external defense, strengthen alliance cohesion, and increase U.S. influence.”⁴³ These new tenets for military operations show the need for a multi-service, multi-nation JSF program. However these attempts will be futile if the effects of sequestration end up taking money away from the JSF to help reduce the national deficit.

Delays of F-35A procurement over the last few years caused the Air Force to contract a \$3 billion Service Life Extension Programs (SLEP) for some F-16s. The

upgrade will extend the service life an additional 2,000 hours and add about eight years of life to the fighter. The upgrade will also improve avionics with an improved defense suite, data link enhancements, and radar upgrades.⁴⁴ Major General Jay Lindell, Air Force director of global power programs said “we expect some viability out of the F-16 fleet if we [are] going to spend that much money to SLEP the aircraft.”⁴⁵ What is uncertain is the future maintenance cost of an aging F-16 fleet even with the SLEP. The savings from the F-35A production slip should pay for the increased costs to operate legacy aircraft. This leaves the Air Force and the DoD with a less capable and less modern force at a risk of not being able to complete the future mission.

Acquisition officials view risk differently than operational planners and senior leaders in the Air Force. This could lead to a belief that there is low risk in delaying the F-35A production as the United States knows of no comparable operational threat to air superiority. One area of concern is a potential conflict between the U.S. and China. However, the economic interdependence of each country decreases the threat of conflict. Recent events between China and Japan and Taiwan do not eliminate the possibility that something could happen in the future—the U.S. does not want lack of preparation to be an excuse for failure.⁴⁶ The U.S. wants to have air superiority as was the case in Iraq, Afghanistan, and Libya. Libya is a current operational model for dealing with corrupt governments causing their citizens to suffer unnecessarily, and air power played a key role in ending a bad situation.⁴⁷ The operational risk is low if the U.S. faces non-peer conflict. The operational risk will increase tremendously if other nations increase their level of technology of air-to-air and air-to-ground threats that will equal or

potentially outmatch what the Air Force and DoD have to operationally protect the citizens of the U.S. and our allies.

The overall F-35A risk from a force management perspective is low to medium. Force management risk, which is “our ability to recruit, retain, train, educate, and equip the All-Volunteer Force, and to sustain its readiness and morale.”⁴⁸ Force management risk requires the DoD to examine how well it provides trained and ready personnel, equipment, and command and control in the near, mid, and long-term.⁴⁹ The military recruits Americans every year answering a call to serve and make a difference. Some join the military for the many benefits, including health care, education, job stability, and retirement benefits. Thanks to these volunteers, the Air Force and the DoD have consistently made recruiting goals for many years. FY 2012 was no different, with all Services making 100% of their recruitment goals.⁵⁰ The Air Force Recruiting Service’s mission is “to inspire, engage and recruit the brightest, most competitive and diverse men and women for service in America’s Air Force. Air Force Recruiting Service recruits quality Airmen from a cross-section of America, responsive to the ever-changing needs of the Air Force.”⁵¹ While recruiting is strong, so is retention; the Air Force recently implemented measures to reduce end-strength to congressionally mandated levels for all ranks. The voluntary and involuntary force management programs help the Air Force to continue to size and shape, but a requirement still exists to have the right balance of skills to meet all future mission needs.⁵² The reductions implemented since 2004 have resulted in an almost 58,000 manpower reduction in the Active, National Guard, and Reserve components of the Air Force.⁵³

Whether or not people join the Air Force to be a part of the F-35A, the number of aircraft produced could affect retention in the future. As the program stands, 1,763 aircraft will replace aging F-16s and A-10s. This quantity justifies a certain end-strength as the older aircraft phase out and F-35As phase in. In September of 2012 the first airmen attained the initial level of certification for organic maintenance, which is a major step to developing the future maintainers of the F-35A—but there is a long way to go.⁵⁴ Having maintenance personnel able to perform what F-35A pilots are currently doing frees the pilots to focus more on flying and allows for more timely maintenance of the jets. Pilots used to perform their own engine maintenance, and this was valuable training, but the balance between maintenance exposure and pilot workload had become a challenge.⁵⁵ This is a crucial first step to establishing Air Force maintainers and creates a program to transition future maintainers to the F-35A. There is also an issue with training pilots to fly the F-35A, as there are only nine test aircraft at Eglin Air Force Base. This, too, will improve when Eglin becomes the site for the F-35A training squadron, with plans for Nellis Air Force Base to stand up the first F-35A weapons school program. As with the maintainers, the number of pilots will continue to grow as more F-35As become available. As long as the current production timeline holds, there will be enough maintainers and pilots when the aircraft roll off the production line. The biggest concern is if the program gets cut and procurement numbers drop significantly. While current F-16 inventory is large, it will only be sufficient for a short time into the future. Crucial upgrades are starting to happen as part of a SLEP, but this will only make the F-16 viable for another 8 years. If there is not a sufficient quantity of F-35As to replace the F-16, the risk would shift to medium or high.

Future challenges risk is “the Department’s capacity to execute future missions successfully, and to hedge against shocks.”⁵⁶ This evaluates how well the DoD field superior capabilities and sufficient capacity to deter or defeat the threat in the mid and long-term. The F-35A is a superior fighter, but it is debatable whether its shifted procurement delay will field operational fighters in time for the unknown future international and political challenges. There are arguments that the F-35A is needed now, as the multirole F-35A is viewed as a critical element to safeguard national security.⁵⁷ The other fifth-generation fighter, the F-22, has capabilities designed to maintain air dominance, and the F-35A has capabilities designed for global persistent attack. Both fighters carry air-to-air and ground weapons and employ stealth technology; but they are complementary aircraft and cannot attain and maintain air supremacy alone—both are needed to achieve national military objectives.

While the F-35A deals with production delays and budget concerns, other foreign adversaries may advance their own objectives, and create threats that could harm the combat effectiveness of U.S. legacy aircraft and current fighter technology. Many nations like China and Russia are developing advanced anti-stealth and Anti-Access Air Defense (A2/AD) programs. This coupled with increasingly better missile technology could pose challenges to U.S. military operations in the future.⁵⁸ Performing SLEP and other upgrades to F-16s may not answer this threat. To meet future (CCDR requirements, the U.S. must be ready and able to support all scenarios; but if there are multiple areas of combat, the greater threat will receive the most fifth-generation assets and all other available assets will go to the lesser threat. This is the best scenario for

combating future threats until the F-35A reaches full production and allows for maximum flexibility and preparedness.

Politics is another future risk jeopardizing the entire JSF program. With the multi-service, multi-nation approach to procurement, it should survive politically; but the current fiscal situation lends itself to potential major reductions in production quantities.⁵⁹ Joint military and international support for the JSF lowers the risk of program termination. The future risk is medium, with the final quantity procured being the decisive factor to lower or raise the risk level with respect to emerging adversary technology.

Priorities for 21st Century Defense

In January of 2012, the President and Secretary of Defense unveiled a strategy for 21st Century defense. It differs from the QDR by shifting emphasis from today's wars to preparing for future challenges. Another major difference is the focus on the Joint Force of 2020 by providing "a set of precepts that will help guide decision regarding the size and shape of the force over subsequent program and budget cycles."⁶⁰ The strategy takes risks, embraces the current fiscal situation, but does not account for a potential \$500 billion additional reduction through sequestration.⁶¹ The President spoke of the risk measured as "an approach that will keep our nation safe and our military the finest that the world [has] ever known."⁶² The joint role in Asia will grow, and the F-22 and F-35A are well suited for this type of environment. Another aircraft in design to help meet the growing need of A2/AD is the long-range strike bomber initially announced in the FY 2012 Air Force President's Budget Rollout.⁶³ This, along with other publically unknown secret programs, will strive to meet the threat laid out in the Defense Strategic Guidance.

The risk scenario is slightly altered based on this new strategy. The institutional risk remains the same from the QDR, medium to high, based on the acquisition challenges thus far, and the potential fiscal reductions coming if sequestration happens. If sequestration doesn't lower the JSF procurement level, one more production delay or cost overrun will. If the JSF lowers production quantities, this could negatively affect the defense industrial base if specific expertise is not needed by the United States and foreign adversaries seek to obtain the expertise to advance their own defense technology. The new Defense Strategic Guidance focus on Asia should keep the operational risk low to medium. Operational risk should also remain low to medium based on the A2/AD threat in the Pacific theater, but again this could change if the U.S. has to respond to a significant threat from China. Force management risk for personnel stays low; there will be a need to maintain, support, and operate the technology we have and will procure in the future. However this could increase if new programs are not developed; then fewer military and civilian personnel is needed to support these new programs. If the DoD successfully procures the JSF in reasonable quantities to meet our new Defense Strategic Guidance, the future challenge risk remains medium. If all the Defense Strategic Guidance goals cannot be met while we try to solve our fiscal crisis, the risk will be higher. The longer it takes to acquire, field, and deliver the right platforms, the higher the future challenge risk will be.

Conclusion

The DoD operates in a strategic risk-reward world. Ultimately, the goal for the DoD is to align programs and people to maximize flexibility in responding to those who threaten our national interests. The QDR sets a long-term course for the DoD as it assesses the threats and challenges the nation faces and re-balances the DoD's

strategies, capabilities, and forces to address today's conflicts and tomorrow's threats.⁶⁴

The QDR sets the stage for the DoD to accomplish national objectives, but deepened fiscal austerity and new Defense Strategic Guidance have altered the strategic risk to maintain the security of the United States, and its allies and partners. The F-35A procurement delay announced in the FY13 Air Force President's Budget was another strategic decision with direct effects to the institutional, operational, force management, and future challenges risks. An adversary may not be able to match the capabilities of the F-35A once procured; but in the time it takes to get them fielded, the U.S. will not know how its adversaries will advance to counteract current capabilities.

Operating under new Defense Strategic Guidance coupled with the current budget woes, the future challenges, institutional, and operational risk could be affected the most. The new focus on Asia and the Middle East and the cost to maintain our legacy aircraft while we wait for the F-35A increase the risk for our nation every day. The F-35A is an expensive fighter in a time of austere funding, but provides capabilities to defeat adversary threats and meets the objectives of the QDR and the Defense Strategic Guidance. Sequestration could decimate the DoD budget, but President Obama believes "we can keep our military strong and our nation secure with a defense budget that continues to be larger than roughly the next 10 countries combined."⁶⁵ One cannot put a price tag on national security; what shouldn't happen are political stalemates affecting risk through mandatory cuts as sequestration would entail. Former SECDEF Robert Gates supported national security, but clearly stated that technology is no longer affordable when it "incurs unacceptable cost and risk."⁶⁶ The goal of the Air Force is to achieve air dominance often and early over the enemy, but if the F-35A does

not move in the right direction soon, the Air Force may not achieve the expected aerial dominance. Properly resourcing the strategy with the right capabilities will determine the United States success. The DoD and Congress must make important strategic choices now to secure and defend the United States; avoiding these choices now allows the United States' rivals to make them instead.⁶⁷

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